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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,312	06/21/2005	David A. Eves	42551-100	1622
26486 7590 10/22/2009 BURNS & LEVINSON, LLP 125 SUMMER STREET BOSTON, MA 02110				
EXAMINER YEN, ERIC L.				
ART UNIT		PAPER NUMBER		
2626				
MAIL DATE		DELIVERY MODE		
10/22/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,312

Applicant(s)

EVES ET AL.

Examiner

ERIC YEN

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-9, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-4, 8-9, 13-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed 4/9/09, applicant has submitted an amendment filed 8/10/09.

Claims 1 and 9 have been amended. Claims 5-7 and 10-12 have been cancelled. New Claims 13-14 have been added.

Claim Objections

1. Claims 1-4, 8-9, 13-14, are objected to because of the following informalities:

Claim 1 recites "extracting musical features the audio signal" which should be – extracting musical features from the audio signal—

Claims 1 and 9 also recite "the original audio signal" when no previous original audio signal has been claimed (Claim 14 recites "received audio signal" which has proper antecedent basis).

2. Claims 2-4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 2-4 recite storing metadata with time data including a time and duration for markup language terms which are all part of the amended limitation in lines 7-9 of Claim 1 and so they fail to further limit their parent claim (Claim 1).

Dependent claims 8 and 13 are objected to based on their dependence on Claims 1 and 9.

Claims 1, 9, and 14 also recite “each markup language term of the instruction set” when no previous “markup language term” is recited in the claims. Also the markup language terms should reflect the <SUMMER>, <EVENING> and <DREAMY POND> examples of the Specification (page 6) since markup language terms, broadly interpreted can be any number of parts of a markup language document and not just a tag.

Appropriate correction is required.

Allowable Subject Matter

Claims 1-4, 8-9, 13-14, contain allowable subject matter.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach the specific combination of limitations in the independent claims, including where time and duration is stored for each term in the metadata (Amendment, page 6), specifically each markup language term of an instruction set of a markup language which is translated from extracted musical features from an audio signal

Davis et al. (US 7,209,571) teaches a method of processing an audio signal comprising acts of receiving an audio signal, extracting musical features from the audio

signal, and translating the extracted features into metadata, the metadata comprising an instruction set of a markup language ("metadata... sound file... average energy, autocorrelation with set delay... computed and stored in metadata", col. 20, lines 49-64; "voice data... music files", col. 19, lines 20-39; "encoding metadata into media signals", col. 21, lines 10-37),

the metadata comprising an instruction set of a markup language ("metadata may be specified using... XML", col. 15, line 49 – col. 16, line 5; "display... to the user... remote... the hashed metadata may be used as a database key to look up", col. 17, line 53 – col. 18, line 15)

receiving markup language assets ("XML processor... provide access to their content and structure", col. 15, line 49 – col. 16, line 5; "display... to the user... remote... the hashed metadata may be used as a database key to look up", col. 17, line 53 – col. 18, line 15).

Levy et al. (US 6,505,160) suggests transmitting the instruction set to a browser, receiving markup language assets, and rendering the markup language assets in synchronization with the received audio signal, which is output ("connect that signal with metadata", col. 2, lines 5-21; "identifier is associated with metadata... physical distribution... electronic distribution... copyright owner, sound recording owner... allows a fan of a particular type of music... get more information", col. 2, lines 38-61; "radio broadcasts... automatically... forwards the identifier to a server to look up the associated metadata or action", col. 9, lines 30-39; "playlist's database... station ID... object ID... mapping", col. 10, line 50 – col. 11, line 8).

Dudkiewicz et al. (US 6,651,253) teaches timing information including time and duration contained in the metadata (Figure 20; col. 25, lines 5-16), but the timing is not for each item of one signal, since the time and duration is for a single programming event (i.e., one entire signal). The synchronization taught by Dudkiewicz also synchronizes clients with global clocks, and not metadata to audio portions.

Sull et al. (US 7,548,565; col. 1, line 59 – col. 2, line 14) (US 2002/0069218; paragraph 32) teaches using metadata including start time and durations for distinct video segments, but does not specifically teach that each segment has its own metadata and that the multiple start positions and durations are for each markup language term in markup language instructions.

If the XML metadata of Davis, which at least obviously includes multiple markup language terms since markup language code rarely if ever functions with a single term, applies to multiple audio segments, then, when combined with Sull, the combination suggests where multiple audio segments each have a time, duration, and corresponding markup language metadata. However, Davis does not provide the specifics of the metadata's structure and whether each audio segment in the audio signal has its own language term.

Therefore, since the prior art of record does not teach or reasonably suggest storing the metadata translated from extracted musical features of a received audio signal, where the metadata comprises an instruction set with terms (i.e., <SUMMER>, <AUTUMN>, Specification, page 6, lines 18-28), and each term has time data including a start time and duration used to synchronize the metadata with the received signal, in

combination with the remaining limitations of the claims, applicant's independent claims contain allowable subject matter and would be allowable if the objections above are overcome.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.
2. This application is in condition for allowance except for the following formal matters:

Objections to Claims 1-4, 8-9, 13-14.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC YEN whose telephone number is (571)272-4249. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EY 10/17/09
/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626